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Claims

(52)

~~(Revised 28-11-2000)~~

1. A process for the production of at least one peptide of interest from a biological fluid which comprises the steps of:
- 5 a) contacting said biological fluid comprising one or more proteins which contain the amino acid sequence of said peptide of interest with a chromatographic medium to adsorb said protein containing said sequence,
- b) subjecting said adsorbed material to hydrolysis to fragment said protein and produce said peptide which remains substantially adsorbed,
- 10 c) washing the medium to remove unbound material,
- d) desorbing said remained substantially adsorbed peptide from said chromatographic medium, and, optionally,
- e) further purifying said desorbed peptide of interest.
- 15 2. The process according to claim 1, further comprising, before step b), the step of washing the medium to remove unbound material.
3. The process according to claim 1 or claim 2, wherein said chromatographic medium is a cation-exchanger.
- 20 4. The process according to claim 1 or claim 2, wherein said chromatographic medium is an anion-exchanger.
5. The process according to claim 1 or claim 2, wherein said chromatographic medium is a medium for hydrophobic interaction chromatography.
- 25 6. The process according to claim 1 or claim 2, wherein said chromatographic medium is a medium for affinity chromatography.
- 30 7. The process according to any one of claims 1 to 6, wherein said chromatographic medium comprises a chromatographic membrane.

8. The process according to any one of claims 1 to 7, wherein the hydrolysis is carried out enzymatically.

9. The process according to claim 8, wherein one or more enzymes are used selected from the group of pepsin, chymosin, trypsin, plasmin, chymotrypsin, subtilisin, and thermolysin.

10. The process according to any one of claims 1 to 9, wherein the biological fluid is selected from the group of milk, whey, blood, blood serum, egg white, culture cells, extracts from culture cells, and plant cells.

11. A peptide, obtainable by the method of any one of claims 1 to 10, having an amino acid sequence selected from the following sequences (1) - (8), or derivatives thereof having a primary amide at the carboxy end thereof, which derivatives do not interfere with any biological properties of the peptide:

(1) VYQHQQAMKPWIQPKT

(2) VYQHQQAMKPWIQPKTKVIPY

(3) VYQHQQAMKPWIQPKTKVIPYVRY

(4) VYQHQQAMKPWIQPKTKVIPYVRYL

(5) PEWSKC*YQWQRRMRKLGAPSITC*IRRTSA (* = linked by a disulfide bridge)

(6) PEWSKCYQWQRRMRKLGAPSITCIRRTSA

(7) TQRKTRNGFRVPLARE

(8) APRKNVRW.

12. Use of a peptide as claimed in claim 11, for the preparation of pharmaceutical compositions, preferably with antimicrobial and/or antiviral and/or antitumour activity.